

## **Appendix I**

### **Weekly Telephone Survey of Charter and Head Boat Vessels**

## TABLE OF CONTENTS

SECTION A - STATEMENT OF WORK.....	3
BACKGROUND.....	3
REQUIREMENTS.....	3
1.0 Stratification .....	3
2.0 Telephone Survey .....	3
2.1 Sampling Frame.....	4
2.2 Sampling Allocation.....	5
2.3 Initial Contact of Head and Charter Boat Captains.....	5
2.4 Head/Charter Boat Telephone Survey Instrument .....	6
2.5 Reporting Requirements .....	6
3.0 Data Transmittal .....	7
SECTION B - PERIOD OF PERFORMANCE .....	7
SECTION C: CONFIDENTIALITY .....	7
Table I.1. Estimates of the Charter and Head Boat Universe and Percent Effort by State.....	8
Table I.2. Example of Sampling Distributions for Charter/Head Boat Telephone Interviews.....	9
Table I.3. Weekly Codes -1999.....	11
Attachment I.A. Draft Head/Charter Boat Telephone Survey Questionnaire.....	12
Attachment I.B. Draft Head/Charter Boat Telephone Questionnaire ASCII Format .....	15

## **SECTION A - STATEMENT OF WORK**

### **BACKGROUND**

The purpose of this option is to allow telephone sampling for the headboat and charter boat modes of fishing on the Atlantic and Gulf coasts based on a sampling frame of operator/vessels. Conduct of the routine MRFSS since 1979 has shown that most anglers who participate in these modes are non-coastal and out-of-state residents, resulting in a large ratio adjustment used to expand coastal trips into total trips. In some cases, that ratio adjustment causes trip estimates to be above the maximum that the known head/charter fleet could make in a wave. Additionally, because very few coastal residents participate in the fishery, the contact rate in the telephone survey is small and patchy. Unstable ratio adjustments and patchy trip estimates have been compensated for by pooling up to five years of telephone trip and intercept residence data. This smooths estimates and fills in empty cells; however, the compensations may mask real changes in effort. Implementation of telephone interviewing using a sampling frame of head/charter boat operators will not result in cost savings, but it will result in increased accuracy and precision of the MRFSS estimates. It also will allow further stratification between the two modes. This option would be implemented on a sub-regional basis.

### **REQUIREMENTS**

#### **1.0 Stratification**

The definitions from the 1999 MRFSS Statement of Work remain the basic definitions for this option; however, because we are more interested in stratifying based on target species and fishing methods, a boat may be classified as a head boat (previously called party boat) or a charter boat based on interviewer knowledge of number of people carried, predominant method of

payment, and the dominant fishing activity, in consultation with the MRFSS staff. A vessel should be assigned to one mode only at the beginning of a wave and will be classified as that mode throughout the wave, no matter what fishing activity occurred on individual trips. A vessel may change modes between waves, based on fish stock seasonality and their fishing activity in response to that seasonality. Mode classifications on the master list may change for individual vessels between waves.

This option applies to the Atlantic, Gulf, and Pacific coasts. From North Carolina, through Louisiana, the routine MRFSS survey does not currently cover headboat fishing; however, this option does allow for their coverage. The option also allows for the inclusion of Texas. Texas is interested in improving their headboat and charter boat estimates and this option allows for a cooperative approach.

## **2.0 Telephone Survey**

The routine telephone survey based on calling randomly selected coastal households will remain the same. The routine telephone survey must be continued to collect shore and private/rental boat data. Because there is very little cost required to obtain head/charter boat trip data compared to the cost of actually making a household contact, the contractor will continue to collect trip data for headboat and charter boat participants when they are encountered. This will also allow for continuation of comparable historical estimates.

The major change is the addition of a separate telephone survey of captain/operators including 1) weekly telephoning periods, 2) separate questionnaire, and 3) reporting requirements. All other telephone survey requirements regarding quality control, call backs, and training shall apply to the head/charter boat survey. Estimates will still be made on a wave

basis therefore training and reporting requirement schedules remain the same as the base MRFSS. Those requirements are provided for in the Statement of Work and Procedures Manual for the 1999 procurement and are incorporated in this Statement of Work by reference.

## **2.1 Sampling Frame**

The Telephone Contractor will not be responsible for compiling the sampling frame, as reasonable execution of that task requires personnel in the field on the coast on a routine basis. Separate sampling frames of all head boats and charter boats within each state will be supplied in electronic format to the contractor one month before each wave. The lists will be compiled and maintained either through cooperative efforts of NMFS with the States and the Interstate Marine Fisheries Commissions or through exercise of the option for the Intercept Contractor to develop the sampling frame. Alternate frames such as permit holders (i.e. Atlantic Bluefin Tuna, Billfish permit holders) may also be used. The lists will include: vessel name, length, maximum number of passengers, usual number of crew members, and registration number; captain's name, work and home phone numbers, and mailing address; answering service/ticket booth that can be used as an alternative to calling the captain; preferred calling time and number; usual docking location (name, address or directions, latitude and longitude); routine species targeted, and fishing method and area of fishing (inland, ocean, etc. and distance offshore). If a captain owns and pilots more than one vessel, the sampling frame will have one unique record for each captain/vessel combination.

Table I.1 contains estimates of the universe of head and charter boats for the Atlantic AND Gulf coast, along with other pertinent information that may be helpful in devising sampling schemes. These kind of data are not readily available for the Pacific coast; however, the NMFS would assemble and provide such

information at least 6 months prior to exercising this option for the Pacific coast.

In some instances charter boats or head boats may have answering services or ticket booths that can be contacted for trip information. Ticket offices are usually open at routine times which can increase the efficiency of sampling. If the captain indicates that their answering service or ticket office can provide reliable trip information, those sources can serve as an alternate interview contact. The alternate source should be used routinely if that is the captain's preference. In some cases, charter or head captains may be required to report to NMFS or States using logbooks. Obtaining data read by the respondent from logbooks will be acceptable.

## **2.2 Sampling Allocation**

Interviewing will occur weekly. The minimum quota for a head boat cell is 1 interview every other week. The minimum quota for a charter boat cell is 2 interviews per week. Interviewing quotas within a wave generally will be based on 1) sampling at least 5% of the universe of head boats each week within a wave and state, and 2) sampling at least 8% of charter boats each week within a wave and state. One example of a sampling scheme is in Table I.2. Where only 1 head boat occurs within a state, that captain/operator would be surveyed every other week. Where head boats are sparse (i.e. Mississippi and Alabama), NMFS may consider combining one or more states in order to reduce the burden on the captains. Any additions to sampling would be based on the same proportions in the base sample.

Captain/vessels in a state will be selected at random from the sampling frame and interviewed about their activity for the previous week. A week is defined as Monday through Sunday. There are eight weeks in waves 1 and 5, and 9 weeks in waves 2, 3, 4, and 6. No

sampling will be conducted on Christmas or Thanksgiving holidays or holiday eves. Telephone interviewing will begin Sunday evening and continue until Wednesday. Specified preferred calling times and numbers should be used to increase the efficiency of sampling. The quota is completed interviews for a captain/vessel combination, whether the vessel made any trips or not.

Each captain selected will be called a minimum of five times before being replaced by another randomly selected captain. No captain will be interviewed more than once within a week, so selections will have to screen for multiple boat ownership.

### **2.3 Initial Contact of Head and Charter Boat Captains**

Prior to the start of the first sampling year all captains listed on the sampling frames will be contacted either by letter, phone, or in person. At this time, the change to the MRFSS program will be explained and their cooperation requested. As new captains are added to the sampling frame, they should also be informed about the survey and their cooperation requested. The contractor may consider doing this special explanation during the initial telephone trip interview with each captain. The MRFSS staff will work with the contractor to develop a letter explaining the rationale behind the new method.

This is a volunteer program, but it should be stressed that their cooperation will greatly enhance the quality of the information collected. Most captains should already be aware of the current MRFSS. The initial contact should explain why we are doing a new type of survey, why we're not using logbooks, what will be expected from them during a wave and a year, how many times they can expect to be interviewed, time involved, the information requested, etc. The initial contact can also be used to fill in missing information on the captain register, and to elicit the best place and time to call. The contractor shall consider providing a logbook form for the captain's use in recording

specified trip information and thus serving as a memory aid. Logbooks already in place can also be used as memory aides.

## **2.4 Head/Charter Boat Telephone Survey Instrument**

Draft questionnaires are included in Appendix I.A. ASCII file formats are shown in Appendix I.B. The final questionnaire will be developed jointly by the contractor and the MRFSS staff to incorporate suggested improvements. Screening will affirm that the person contacted is the selected head/charter captain or his/her designated alternative source. Information collected during the interview will include details about each trip taken the previous week, beginning with Monday. For head/charter boat captains questions will include: Total number of trips, trips by type (charter or head, commercial, personal, other), dates/days of each trip, number of passengers, how many anglers on each trip, target species, fishing method, docking site, area fished, and time of return to the dock. Other types of trips that are not related to "for-hire" marine recreational fishing will be identified and profiled to aid in NMFS verification efforts. Examples include commercial fishing, non-consumptive (whale-watching, educational, etc.), or shake down trips to try out new equipment or motors.

## **2.5 Reporting Requirements**

Head/charter boat telephone interview data are stored in a two record hierarchical format with records linked by a unique identifier for each captain/vessel combination. The identifier includes year, wave, subregion, state, and captain/vessel code number. Unique captain/vessel code numbers will be assigned in development of the sampling frame and can be used to link back to the sampling frame files. Because vessels can switch between the charter and head boat modes in different waves, one unique master set of code numbers will be used. ASCII or SAS file formats will be

developed in cooperation with the contractor. Data included within each record type are:

Type 1 - Identifying information on the captain/vessel, month surveyed, week surveyed, numbers of days with head or charter trips, number of days with other types of trips, and total number of trips. There is one record per captain/vessel per week. There will be a type 1 record for all captain/vessel interviews, whether trips were made or not. Table I.3 shows the recording codes for months and weeks during 1999.

Type 2 - Information on each fishing trip taken during the previous week. Includes detailed information on trip type, mode and area of fishing, number of paying anglers, total trip time, fishing time, target species, and gear used. Zero or more records per captain/vessel.

The RFP specifies the data and reports needed by NMFS on a regular basis to effectively monitor the conduct of the telephone household survey. Dialing results by mode will be maintained separately for each week. ASCII or SAS file formats will be developed in cooperation with the contractor. Those reports are incorporated by reference.

Number of captain/vessels in sampling frame (will not change within a wave)  
 Number of captains originally selected for sampling,  
 Number never reached (no answer, line busy, answering machine, answering service that could not provide trip information, not in service/disconnected number/dead line, connected to wrong number),  
 Number of captains refused interview,  
 Number of replacements needed to obtain quota,  
 Number of captain/vessels interviewed with one-week fishing activity.

Number of captain/vessels interviewed with no fishing activity.

Timely submission of these performance data is necessary to maintain data collection quality through identification of problem areas and adjustment of procedures as necessary.

### **3.0 Data Transmittal**

Current data transmittal requirements for the routine MRFSS are provided for in the Statement of Work for the 1999 contract and are incorporated in this Statement of Work by reference.

### **SECTION B - PERIOD OF PERFORMANCE**

The period of performance shall be on an annual basis as provided for the routine MRFSS in the Statement of Work for the 1999 contract and is incorporated in this Statement of Work by reference.

### **SECTION C: CONFIDENTIALITY**

The data collected for the survey shall be used only for statistical purposes, and will be available in identifiable form only to NMFS and its contractors except as otherwise required by law. All requirements of the Privacy Act of 1974 (P.L. 93-579) concerning the collection and use of identifiable information for individuals shall be observed.

**Table I.1. Estimates of the Charter and Head Boat Universe and Percent Effort by State.**

Region		State	Head			Charter Boats		% MRFSS Effort
			Mn. capacity	Number	% Boats	Number	% Boats	
Northeast (Region II)	North Atlantic	Maine	25	15	2.06	25	6.05	1
		New Hampshire	49	11	1.51	62	15.01	2
		Massachusetts	50	56	7.69	177	42.86	6
		Rhode Island	90	4	0.55	70	16.95	1
		Connecticut	65	21	2.88	79	19.13	1
	Sub-Total			107	14.70	413	8.54	11
	Mid-Atlantic	New York	20	76	10.44	200	20.49	14
		New Jersey	79	58	7.97	227	23.26	22
		Delaware	20	40	5.49	54	5.53	2
		Maryland	10	113	15.52	393	40.27	5
		Virginia	25	62	8.52	102	10.45	4
	Sub-Total			349	47.94	976	20.19	46
	Region Total			456	62.64	1389	28.73	58
Southeast (Region III)	South Atlantic	North Carolina	60	60	8.24	180	30.20	5
		South Carolina	70	70	9.62	151	25.34	3
		Georgia	?	?	0.00	70	11.74	2
		Florida	22		3.02	195	32.72	10
	Sub-Total			152	20.88	596	12.33	20
	Gulf of Mexico	Florida	?	78	10.71	2000	70.18	18
		Alabama	?	5	0.69	120	4.21	3
		Mississippi	?	0	0.00	70	2.46	1
		Louisiana	?	8	1.10	260	9.12	1
		Texas	?	29	3.98	400	14.04	?
		Sub-Total			120	16.48	2850	58.95
	Region Total			272	37.36	3446	71.27	43
	Grand Total				728	100.00	4835	100.00

**Table I.2. Example of Sampling Distributions for Charter and Head Boat Telephone Interviews**

SAMPLING INFORMATION						ANNUAL MINIMUM N
No. Boats	Minimum N/week	% of Universe	Maximum N Waves 1 &6	Maximum N Waves 2,3,4 & 5	Mn Contact per boat per wave	
13	1	0.05	8	9	0.69	44
180	14	0.08	112	126	0.70	616
193	15	0.08	120	135	0.70	675
12	1	0.05	8	9	0.75	44
151	12	0.08	96	108	0.72	528
163	13	0.08	104	117	0.72	585
1	.5*	0.05	4	5	4.00	25
70	6	0.08	48	54	0.77	270
71	6	0.08	52	59	0.83	295
63	3	0.05	24	27	0.43	156
195	16	0.08	128	144	0.74	832
258	19	0.07	152	171		1,026
89	5	0.06	44	50	0.56	269
596	48	0.08	384	432	0.72	2,246
685	53	0.08	428	482		2,581
78	4	0.05	32	36	0.46	208
2,000	160	0.08	1,280	1,440	0.72	8,320
2,078	164	0.08	1,312	1,476	0.71	8,856
5	3	0.50	24	27	5.40	156
120	10	0.08	80	90	0.75	520
125	13	0.10	104	117	0.94	702
0	0	0.50	4	5	0.00	0
70	3	0.08	24	27	0.39	156
70	3	0.04	28	32	0.46	192
8	.5*	0.50	4	5	0.63	28
260	21	0.08	168	189	0.73	1,092
268	21	0.08	172	194		1,164
29	1	0.05	8	9	0.31	52
400	32	0.08	256	288	0.72	1,664
429	33	0.08	264	297		1,782
120	8	0.07	72	82	0.68	444
2,850	226	0.08	1,808	2,034	0.71	11,752
2,970	234	0.08	1,880	2,116		12,196
209	13	0.06	116	132	0.63	713
3,446	274	0.08	2,192	2,466	0.72	13,998
3,655	287	0.08	2,308	2,598		14,777
665	38	0.06	316	357	0.54	1,795
4,835	384	0.08	3,072	3,456	0.71	18,775
5,500	422	0.08	3,388	3,813		20,762

**Table I.3. Weekly Codes -1999**

Wave	Week								
	1	2	3	4	5	6	7	8	9
1	1/4-1/9	1/10-1/17	1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	
2	3/1-3/7	3/8-3/14	3/15-3/21	3/22-3/28	3/29-4/4	4/5-4/11	4/12-4/18	4/19-4/25	4/26-5/2
3	5/3-5/9	5/10-5/16	5/17-5/23	5/24-5/30	5/31-6/6	6/7-6/13	6/14-6/20	6/21-6/27	
4	6/28-7/4	7/5-7/11	7/12-7/18	7/19-7/25	7/26-8/1	8/2-8/8	8/9-8/15	8/16-8/22	8/23-8/29
5	8/30-9/5	9/6-9/12	9/13-9/19	9/20-9/26	9/27-10/3	10/4-10/10	10/11-10/17	10/18-10/24	10/25-10/31
6	11/1-11/7	11/8-11/14	11/15-11/21	11/22-11/28	11/29-12/5	12/6-12/12	12/13-12/19	12/20-12/26	12/27-1/2

**Attachment I.A**  
**Draft Head/Charter Boat Telephone**  
**Survey Questionnaire**

**RECREATIONAL FISHING QUESTIONNAIRE  
HEAD/CHARTER BOAT CAPTAIN TELEPHONE QUESTIONNAIRE**

Hello, I'm calling long distance for a survey being conducted for the National Marine Fisheries Service of the U.S. Department of Commerce. Is this the captain (or alternate preferred information source) of the name of vessel?

**If Yes, continue. If No, ask to speak to the captain or thank respondent and terminate interview.**

We're surveying head and charter boat captains to estimate total trips and catch. Your vessel has been selected at random for this week's survey of trips. **Assign proper mode based on vessel register designation: 6. Head boat, 7. Charter Boat.**

I'd like to ask you a few questions about this past week's fishing trips. A week means Monday through Sunday. We're interested in all your saltwater trips in the last week including those with paying customers; trips where you went with friends, family, or by yourself for pleasure; trips you made as a commercial fisherman; and any other types of trips. This data will remain confidential. This survey is being conducted in accordance with the Privacy Act of 1974, therefore you are not obligated to answer any question if you find it to be an intrusion of your privacy. **(Continue with interview).**

**Q.1. For all Boats:** During the last week (Monday through Sunday) how many total trips did you make? **Record number of trips.**

We will begin with your most recent trip and work backwards to last Monday. I have a calendar here in front of me so I can help you with the dates. **Repeat the following questions for each trip.**

**Q.2.** When did you last go fishing? **(Assign trip number and record date of trip. If DK date, ask month and then ask if weekday or weekend.)**

**Q.3.** What docking site did you return to after your fishing trip? **CATI should show the normal docking site (state code, county code and site code) of the captain/vessel. If not the normal site, record name, state, and city/county of location and look up on master site register for codes.**

**Q.4.** Was this a head or charter boat trip; a trip for your own pleasure, either by yourself or with family or friends; or a commercial fishing trip; or some kind of non-fishing trip (whale watching, diving, etc.).

**Q.5.** Was this a full day, a half day, or a multi-day trip? **If half-day trip, at the end of profiling the current trip, ask if they made any other trips that day and profile those trips.**

**Q.5.a. If multi-day trip, ask**

How many days was the trip? **A day is from 1 minute past midnight to midnight.**

**Q.6.** What time did your boat return?

**Q.7. If answer to Q.4. was a head or charter boat trip, ask**

Was this trip a chartered trip or did people pay by the head?

**Q.8. All trips**

How many passengers did you carry on that trip, not including yourself or crew?

**Continue for any type of fishing trip. If not a fishing trip, continue getting information on the next trip.**

- Q.9. How many of your passengers fished?
- Q.10. What was your target species on that trip? **List up to two target species.**
- Q.11. What was your primary method of fishing on that trip? (1=trolling, 2=drift fishing, 3=bottom-fishing)
- Q.12. Was most of your effort that day in the ocean, sound, river, or bay?
- (Probe river:)** Were you fishing in the lower part of the river which is brackish or affected by the tide?  
**(If no, disregard trip.)**  
**(Probe bay:)** Was that an open bay or an enclosed bay?  
**(Probe inlet:)** Were you more toward the outside or more toward the outside of the inlet?
- Q.13. **If Q10 is sound, river, or bay:** Probe for estuary. If listed on current MRFSS list of estuaries or rivers, enter alpha code.
- Q.14. **If ocean,** were you
1. <=3 miles from shore (all but WFL and TX)
  2. > 3 miles from shore (all but in WFL and TX)
  3. <=10 miles from shore (WFL and TX)
  4. > 10 miles from shore (WFL and TX)

**(Repeat Questions 2-14 until all trips in the past week have been profiled.)**

**Attachment I.B**  
**Draft Head/Charter Boat Telephone**  
**Questionnaire ASCII Format**

**Head/CHARTER TELEPHONE INTERVIEW DATA FORMAT, 1996****TYPE 1 RECORDS:**

<u>Position</u>	<u>Variable</u>	<u>Description</u>
1	Rectype	Record Type 1 = Captain's total weekly activity
2	Surtyp	Survey Type 1 = telephone interview
4	Reg_res	Region of Residence 1 = Southern California 2 = Northern California 3 = Pacific Northwest 4 = North Atlantic 5 = Mid-Atlantic 6 = South Atlantic 7 = Gulf of Mexico
5-10	Codenum	Vessel ID Number
11-12	St_res	FIPS Code for State where vessel normally berthed
13-15	Cnty_res	FIPS Code for County where vessel normally berthed
16	Int_week	Week of interview (sequential 1-5)
17-22	Date_int	Actual date of interview (YYMMDD)
23	Source	Source of information 1=captain 2=alternate source (ticket office/answering service)
23-24	Num_trps	Total number of trips made in the week (Monday through Sunday)
25-26	Num_chart	Number of charter boat trips in the week
27-28	Num_head	Number of headboat trips in the week
29-30	Num_pers	Number of personal trips in the week
31-32	Num_comm	Number of comercial trips in the week
33-34	Num_oth	Number of other types of trips in the week
70-71	Year	Year of survey
72	Wave	Wave of Survey 1=Jan/Feb    4=Jul/Aug 2=Mar/Apr    5=Sep/Oct

3=May/Jun    6=Nov/Dec

**TYPE 2 RECORDS:**

<u>Position</u>	<u>Variable</u>	<u>Description</u>
1	Rectype	Record Type 2 = individual trip data
4	Reg_res	Region of Residence 1 = Southern California 2 = Northern California 3 = Pacific Northwest 4 = North Atlantic 5 = Mid-Atlantic 6 = South Atlantic 7 = Gulf of Mexico
5-10	Codenum	Vessel ID Number
11-12	St_res	FIPS Code for State where vessel normally berthed
13-15	Cnty_res	FIPS Code for County where vessel normally berthed
16-17	Trp_num	Trip Number
18-19	Year	Year of fishing trip
20-21	Month	Month of fishing trip
22-23	Day	Day of fishing trip
24	weekend	If day is not known then code: 1 = weekday 2 = weekend 9 = don't know
25	Mode_f	Fishing mode 6 = Head boat 7 = Charter boat
26-30	Dock_site	Docking site of the trip (from Master site list - routine MRFSS)
31-33	Cnty_site	County of Docking site of the trip
34-43	City_site	City of Docking site of the trip
44	Day_trp	Full-day, half_day, or multi-day trip 1=Full 2=Half 3=Multi-day
45	Days	If multi-day trip, the number of days on the trip.
46	Triptype	Trip type 1=Head or charter fishing

2=Fishing for own pleasure

3=Commercial fishing

4=Non-fishing trip (Whale-watching, diving, scientific  
cruise)

**TYPE 2 RECORDS:**

<u>Position</u>	<u>Variable</u>	<u>Description</u>
47-50	Time	Time fishing trip completed (Hours and minutes) 1-24 hour system
51-53	People	Number of paying passengers
54-56	Anglers	Number of paying passengers who actually fished
57-66	Targ_1	Primary species targeted
67-76	Targ_2	Secondary species targeted
77	Fish_how	Fishing method 1=trolling, 2=drift fishing, 3=bottom fishing
78	Area	Area of fishing trip 1 = Open water 2 = Sound 3 = River 4 = Bay 5 = Other
79	Bay	Alpha estuary codes
80 shore (all but WFL and TX)	Dist	Distance from shore                      1 <=3 miles from  2 > 3 miles from shore (all but in WFL and TX) 3 <=10 miles from shore (WFL and TX) 4 > 10 miles from shore (WFL and TX)
81-82	St	FIPS code for state of fishing trip
83-85	Cnty	FIPS county code for county of trip
86-87	Year	Year of survey
88	Wave	Wave of Survey